

EXHIBIT F-4

DETAILED INTERFERENCE STUDY

KSCI(TV), Channel 18, San Bernardino, California
 Coordinates: 34° 11' 15" - 117° 41' 53.5"
 ERP (main lobe, maximum) - 3334 kw
 HAAT = 2380 feet

KSCI				Proposed Channel 33			
Az. (°T)	Effective* Ht. (ft. AAT)	ERP** (dbk)	64 dbu (mi.)	Az. (°T)	Effective* Ht. (ft. AAT)	ERP (dbk)	70 dbu (mi.)
25	-1386	17.5	13.5	205	1629	-1.3	13.5
30	- 789	18.2	14	210	1622	-1.2	13.5
35	- 162	18.8	14.5	215	1617	-1.3	13.5
40	- 194	19.3	15	220	1616	-1.4	13.0
45	- 491	19.8	15	225	1625	-1.4	13.1
50	- 891	21.7	17	230	1640	-1.4	13.2
55	-1049	23.2	18.5	235	1661	-1.3	13.6
60	-1022	24.5	19.5				

* Determined by NGDC database and FCC file data;
 if HAAT < 0, 100 feet assumed

** From BLCT-2579 (main lobe, worst-case)

EXHIBIT F-4

(cont'd)

K33AD, Channel 33, Bear Valley Springs, California
 Coordinates: 35° 09' 09" - 118° 34' 50"
 ERP = 0.02 kw (max.); HAAT = 540 feet

K33AD				Proposed Channel 33			
Az. (°T)	Effective* Ht. (ft. AAT)	ERP** (dbk)	74 dbu (mi.)	Az. (°T)	Effective* Ht. (ft. AAT)	ERP (dbk)	29 dbu (mi.)
90	392	-17.0	2.0	280	1742	-3.0	75
100	484	-17.0	2.2	285	1754	-3.6	74
110	358	-17.0	1.9	290	1777	-4.2	72
117	207	-17.0	1.6	295	1806	-5.0	70
120	50	-17.0	1.1	300	1839	-5.7	70
130	-440	-17.0	1.1	305	1853	-7.3	66
135	-588	-17.0	1.1	310	1854	-9.2	61

* Determined by NGDC database and FCC file data;
 if HAAT < 0, 100 feet assumed

** Worst-case ERP assumed

BPTTL-831214WV, Channel 33, Thermal, California
 Coordinates: 33° 39' 34" - 116° 05' 24"
 ERP = 10.4 kw (max.); HAAT = 91 feet

BPTTL-831214WV				Proposed Channel 33			
Az. (°T)	Effective* Ht. (ft. AAT)	ERP** (dbk)	74 dbu (mi.)	Az. (°T)	Effective Ht. (ft. AAT)	ERP (dbk)	29 dbu (mi.)
270	567	9.4	11.5	120	1509	-5.7	64
280	549	9.6	11.5	125	1528	-5.0	67
290	542	9.9	11.5	130	1513	-4.2	68
300	534	10.1	11.5	135	1507	-3.6	70
315	446	10.1	10.5	140	1489	-3.0	70
320	352	10.0	9.5	145	1485	-2.6	72
330	240	9.6	7.5	150	1501	-2.3	73

* Determined by NGDC database and FCC file data;
 if HAAT < 0, 100 feet assumed

** From FCC application data

EXHIBIT F-4

(cont'd)

KMEX-TV, Channel 34, Los Angeles, California
Coordinates: 34° 13' 35" - 118° 03' 56"
ERP = 1950 kw (max.); HAAT = 2940 feet

KMEX-TV		Proposed Channel 33		
		Az. (°T)	Effective* Ht. (ft. AAT)	ERP (dbk) 79 dbu (mi.)
<i>See Exhibit F-5</i>		225	1605	-1.4 7.6
		230	1620	-1.4 7.6
		235	1641	-1.3 7.7
		240	1656	-1.2 7.7
		245	1674	-1.3 7.8
		250	1690	-1.3 7.8
		255	1704	-1.4 7.8

* Determined by NGDC database and FCC file data

ENGINEERING EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
SPANISH INTERNATIONAL COMMUNICATIONS CORPORATION
STATION KMEX-TV
LOS ANGELES, CALIFORNIA
CH 34 1950 KW(MAX) DA 2940 FT

Tabulation of Data Relative to Coverage Contours

True bearing of Radial (degrees)	2-10 Mile Average Elevation of Radial (ft AMSL)	Antenna Height Above Average Terrain (feet)	Depression Angle per 73.684(c) (Ah) (degrees)	Depression Angle of Vertical Plane Maximum (degrees)	Vertical ^{Major field} rel. to vert. major lobe			Distances to Contours	
					Plane Relative Field at Ah	ERP at Vertical Plane Maximum (dBk)	ERP at Ah (dBk)	Grade A 74 dBu (miles)	Grade B 64 dBu (miles)
0	4698	1178	0.53	0.27	.274 0.99	.98 21.83	.28 21.8	27.5	37
30	4693	1183	0.53	0.00	.375 0.945	1 24.37	.57 24.4	30	40
45	4690	1186	0.53	0.07	.33 0.96	1 23.26	.33 23.3	29	39
60	4401	1475	0.59	0.27	.274 0.985	.98 21.83	.28 21.8	30	40
90	3822	2054	0.69	-1.00	.375 0.985	.815 26.15	.46 26.2	37	50
120	2195	3681	0.93	2.00	.352 0.80	.445 30.84	.79 28.9	48	64
135	1381	4495	1.03	2.52	.293 0.65	.525 31.93	.9 28.2	50	68.5
145	1295	4581	1.04	2.85	.292 0.505	.307 32.44	.95 26.5	48	65
160	1000	4876	1.07	3.29	.301 0.38	.304 32.80	.99 24.4	45.5	62
180	994	4882	1.07	3.73	.299 0.315	.299 32.89	1 22.9	44	59.5
200	1060	4816	1.06	3.97	.272 0.308	.275 32.80	.99 22.6	43	59
225	1143	4733	1.05	3.93	.272 0.308	.275 32.80	.99 22.6	43	59
250	1975	3901	0.96	3.53	.291 0.32	.3 32.63	.97 22.7	40.5	55
270	2700	3176	0.86	3.00	.276 0.406	.305 32.21	.905 24.4	40.5	54
300	3587	2289	0.73	2.00	.327 0.72	.445 30.25	.75 27.4	40.5	53
315	4030	1846	0.66	1.48	.387 0.88	.635 28.67	.61 27.6	38	50
330	4253	1623	0.62	1.00	.379 0.98	.815 26.24	.45 26.2	35.5	45
Average	2932	2944	(rounded to 2940)						

320
100

Obtained by interpolation - not included in average.

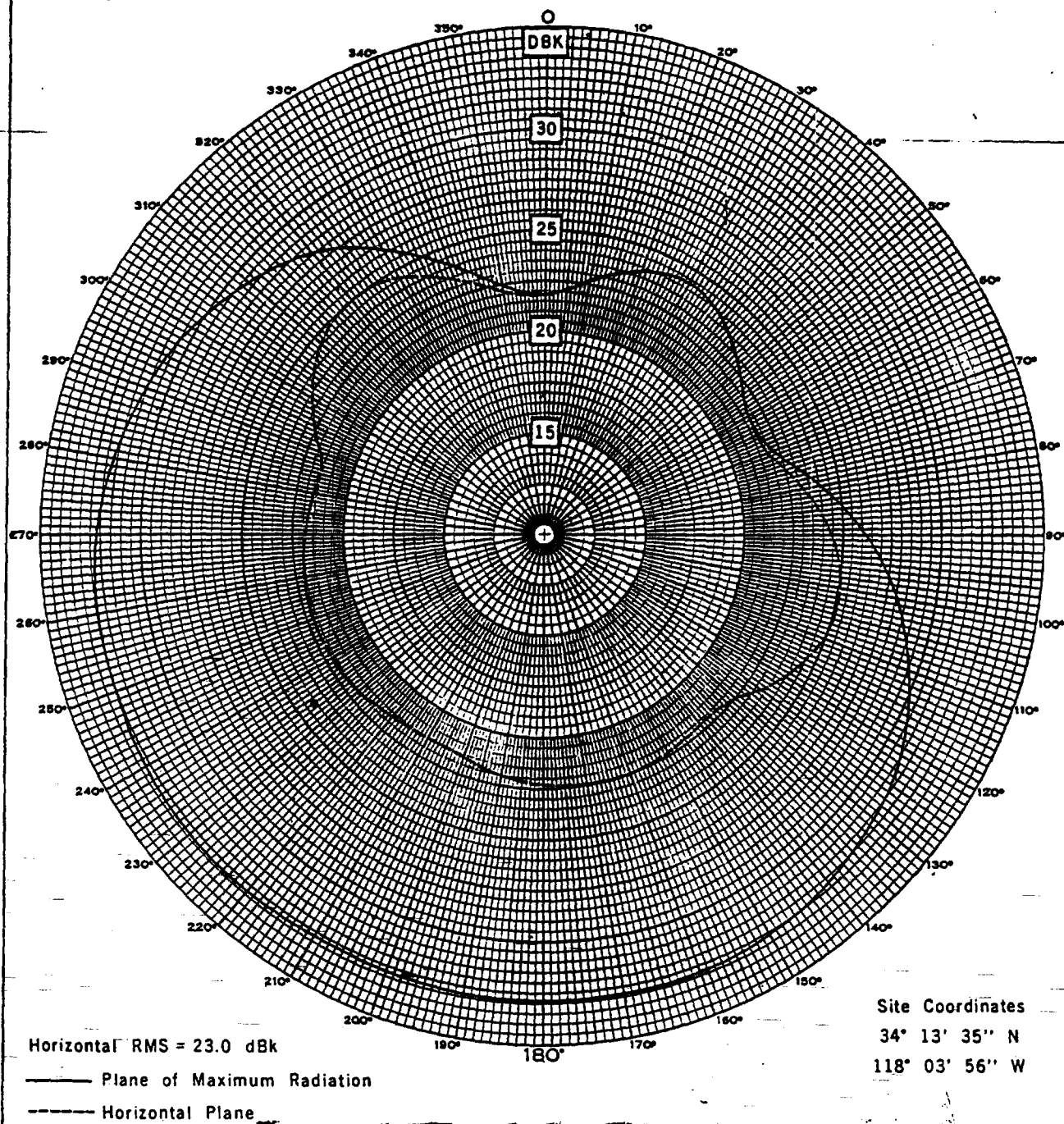
Maximum radiation employed.

$rms = .318$
 $= -7.94 dB$
 $1.32 \rightarrow .379 \rightarrow .7 \rightarrow .57$
 $1.32 \rightarrow .402 \rightarrow .7 \rightarrow .575$
 $7.73 dB \text{ ant gain } \approx 7.76$
 $7.20 dB \approx 7.76$

SMITH and POWSTENKO
 EXHIBIT F-5
 Figure 5
 Sheet 1 of 2

Figure 3
Sheet 2 of 2

JULY 1977



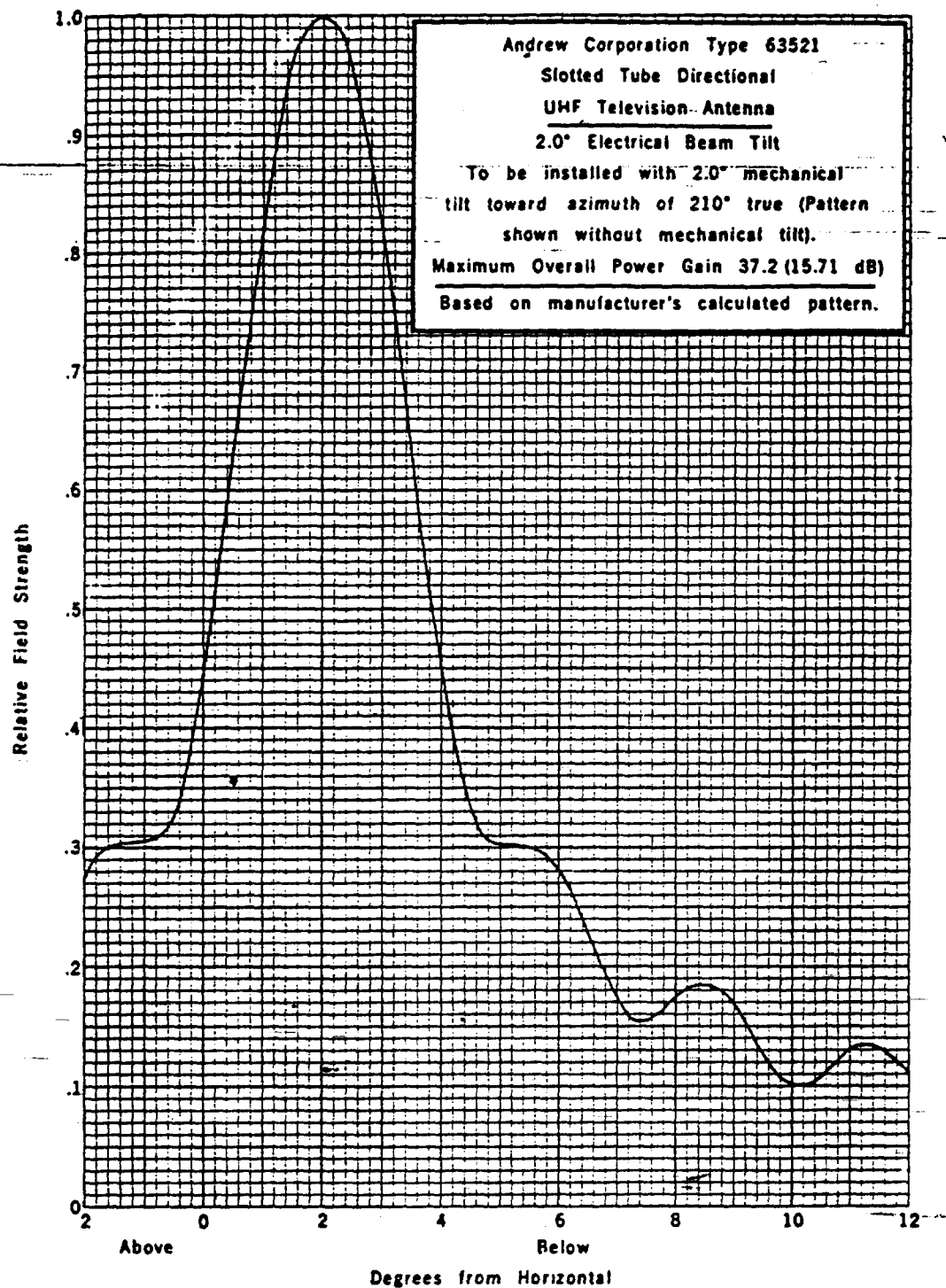
ANTENNA HORIZONTAL PLANE RADIATION PATTERN DBK

SPANISH INTERNATIONAL COMMUNICATIONS CORPORATION
STATION KMEX-TV LOS ANGELES, CALIFORNIA
CH 34 1950 KW (MAX) DA 2940 FT

Jules Cohen & Associates Consulting Electronics Engineers

EXHIBIT VI

JULY 1977

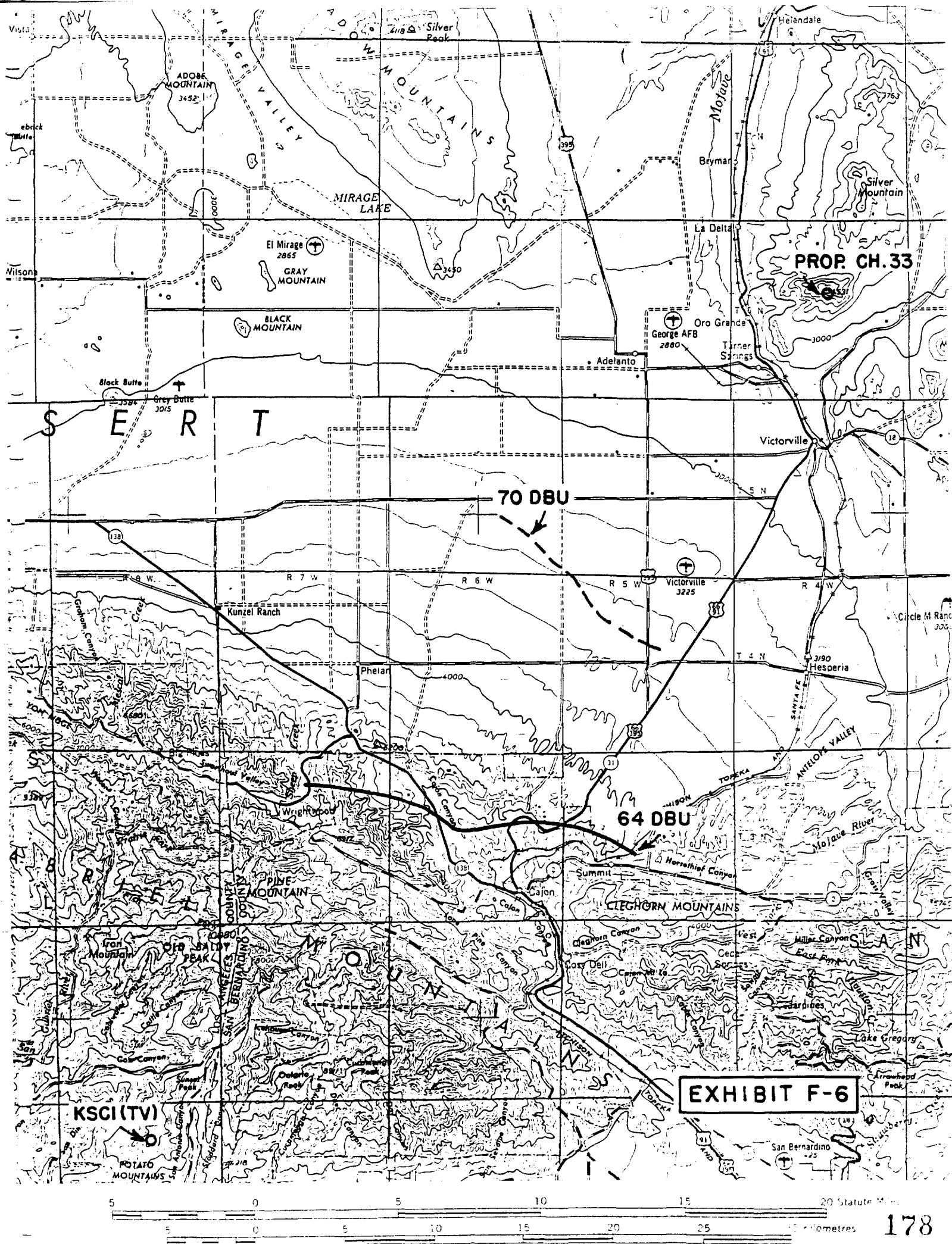
ANTENNA VERTICAL PLANE RADIATION PATTERN

SPANISH INTERNATIONAL COMMUNICATIONS CORPORATION

STATION KMEX-TV LOS ANGELES, CALIFORNIA

CH 34 1950 KW (MAX) DA 2940 FT

Jules Cohen & Associates Consulting Electronics Engineers



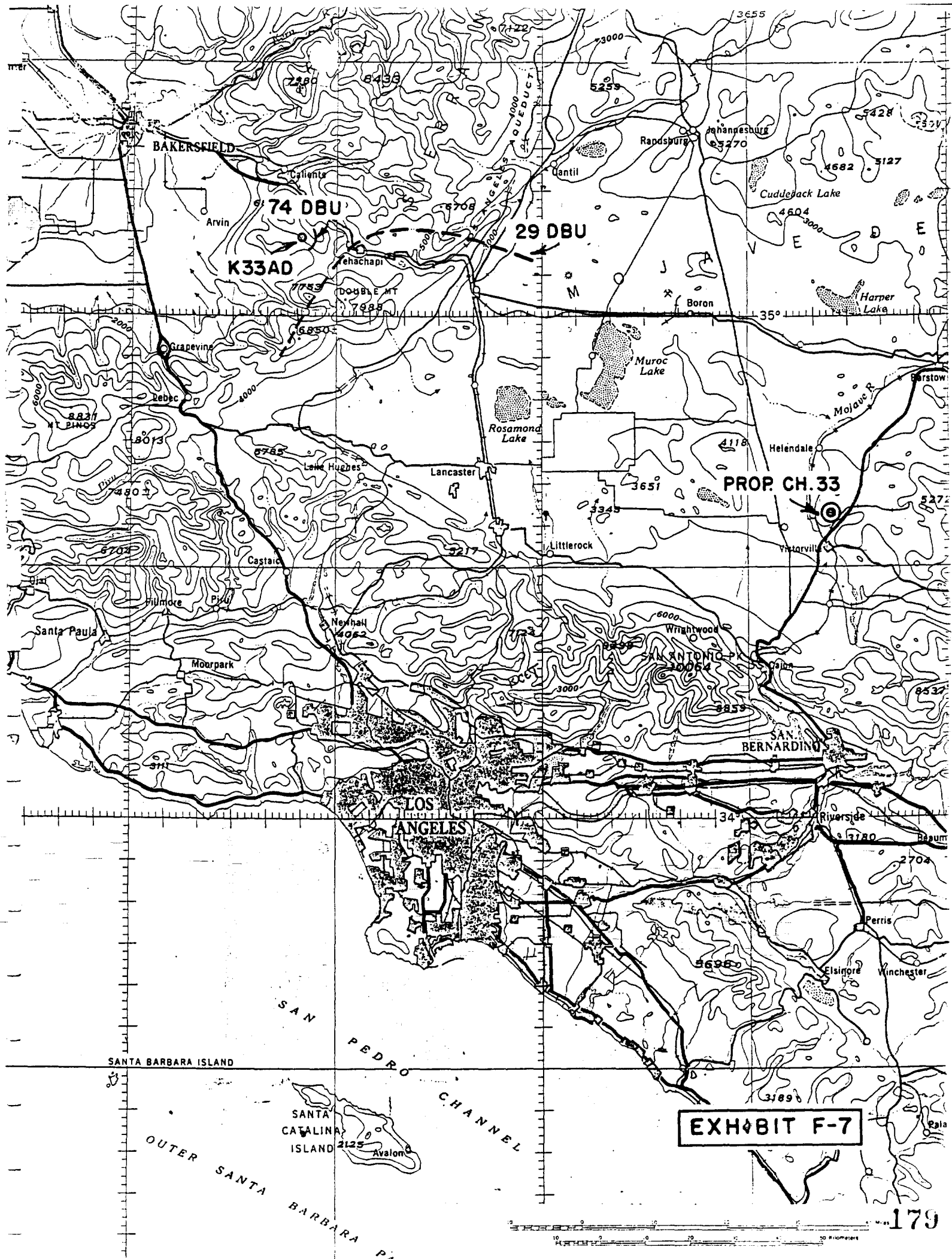


EXHIBIT F-7

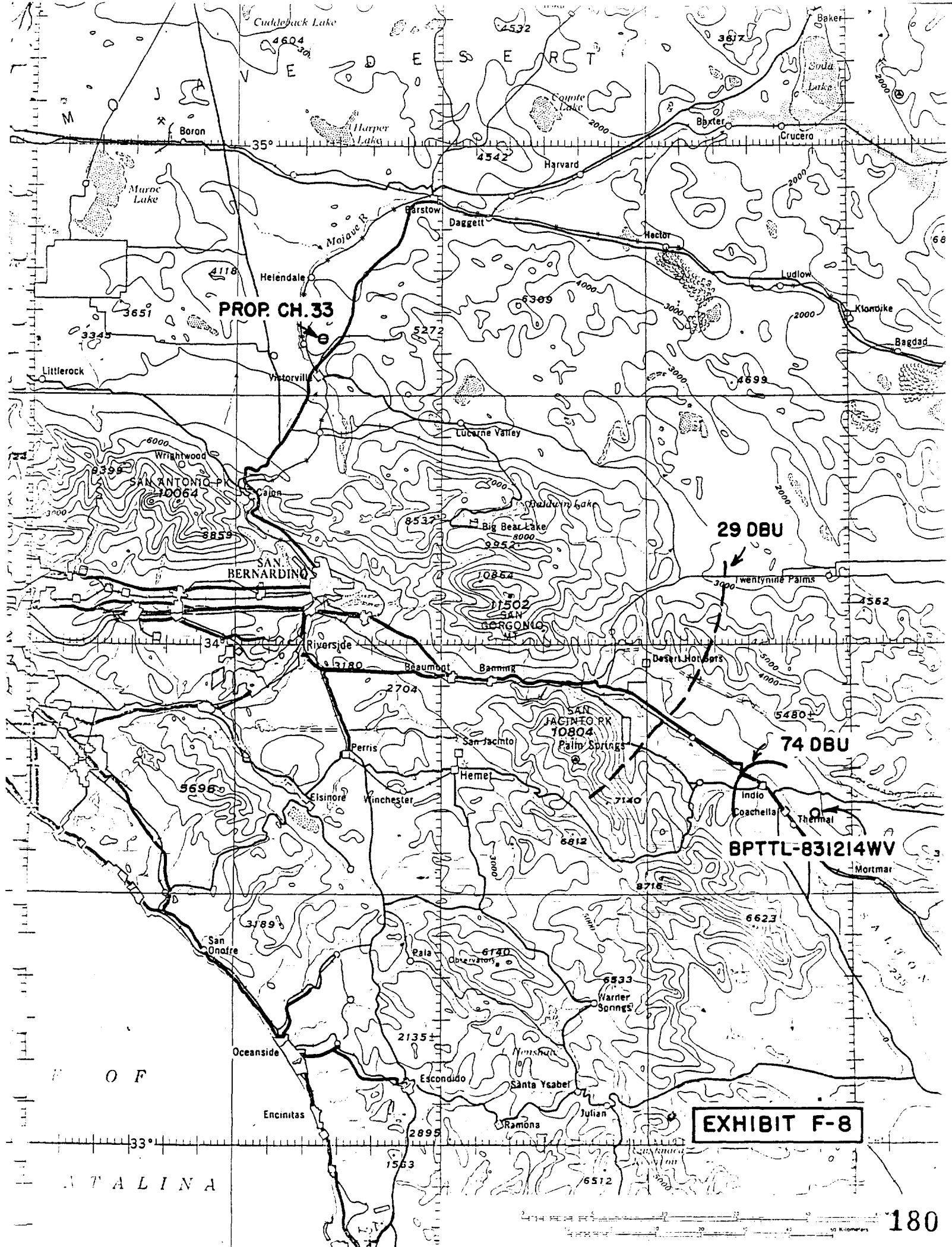


EXHIBIT F-8

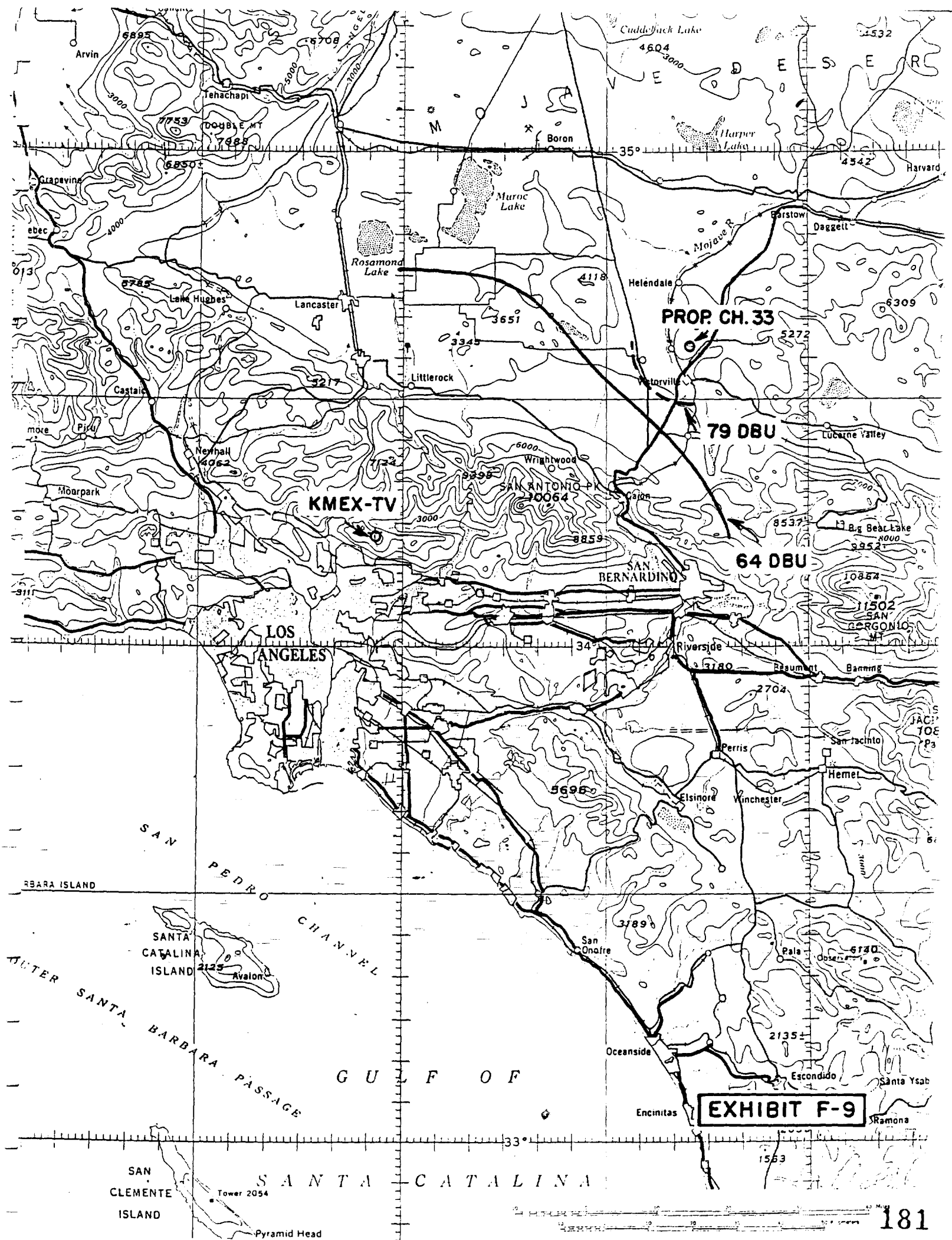


EXHIBIT F-9

Section VI

ENGINEERING DATA

1. Facilities requested:

a. Output Channel No. 33 Transmitter Rated Power Output 100 W Proposed Principal Community(ies) to be served VICTORVILLE City CA State
Frequency 584-590 MHz.

Primary station (station to be rebroadcast — Translator station only)

Call Sign KTBN-TV SANTA ANA City CA State Frequency 626-632 MHz.

b. Offset (Low Power TV and TV Translator Stations only)

(Check one of the following)

☐ No offset ☒ Zero offset ☐ Plus offset ☐ Minus offset

c. Input Channel Frequency

No. 62 758-764 MHz.

If station is to operate via another translator station, indicate call sign and location of final intermediate translator.

K62AN, Lancaster, California

2. Proposed transmitter location:

City near VICTORVILLE

State CA

County SAN BERNARDINO

Address or other description of location:

Atop Quartzsite Mountain

Geographical coordinates of transmitting antenna to nearest second

North Latitude 34° 36' 36" West Longitude 117° 17' 13"

Attach as Exhibit No. B a map or maps (preferably topographic, if obtainable, such as Geological Survey quadrangles) for of the area of the proposed transmitter location shown drawn thereon the following data:

a. Scale of miles.

b. Proposed transmitter location accurately plotted.

c. Principal community to be served by the proposed station, clearly identified and labeled.

3. Transmitter:	Make <u>Television Technology</u>	Type No. <u>UUST-105B</u>	Length <u>[REDACTED]</u>	Output Power <u>0.074</u> kw.
4. Transmission line:	<u>Andrew</u>	<u>HJ7-50A</u>	<u>50</u> ft.	Rated efficiency E for length given (decima: fraction) <u>0.943</u>
5. Transmitting antenna <input type="checkbox"/> Directional <input type="checkbox"/> Non-Directional				
Manufacturer <u>Bogner</u>		Model <u>B4UR</u>		Description <u>Slotted cylinder</u>
Orientation ² <u>210° T</u>	Height above ground ³ <u>35</u> ft.	Elevation of Site ⁴ <u>4500</u> ft.	Power gain G (multiplier) in lobe of maximum radiation relative to a halfwave dipole ⁵ <u>10.8</u>	

Effective radiated power (ERP)
(ERP=P X E X G) 0.75 kw.

Height of antenna radiation center above mean sea level 4530 ft.

¹Give basic type using general descriptive terms such as half-wave dipole, "bow-tie" with screen, corner reflector, 10 element Yagi, 4 element in-phase array, two stacked 5 element Yagis, etc.

²Show the direction of the main radiation lobe in degrees with respect to true north in a 360 degree horizontal azimuth, numbered clockwise, with true north as zero azimuth.

³Show height to topmost portion of structure, including highest top mounted antenna and beacon if any

⁴Show the ground elevation above mean sea level at the base of the transmitting antenna supporting structure

⁵Give the actual power gain toward the radio horizon.

6. Attach as Exhibit No. C a vertical plan sketch for the proposed total structure(s) including supporting structure(s), giving height of center of radiation above ground, overall height of structure above ground, including lighting beacon (if any) and height above mean sea level in feet for all significant features for BOTH RECEIVING AND TRANSMITTING ANTENNAS. Also indicate any horizontal separation between receiving and transmitting antennas.

7. Will the proposed antenna supporting structure be shared with another station or stations of any class?

If Yes, list the call signs and class of such stations.

☒ YES ☐ NO

Various non-broadcast facilities

8. Attach as Exhibit No. E a polar diagram of the radiation pattern (relative field) of the transmitting antenna showing clearly the correct relationship between the major lobe or lobes and the minor lobes of radiation and a tabulation of the pattern at every ten degrees and all maxima and minima. Applicants proposing use of multiple transmitting antennas shall submit a composite radiation pattern. If a non directional transmitting antenna will be employed, i.e. an antenna with an approximately circular radiation pattern, check here ☐ and omit polar diagram.

9. Has FAA been notified of proposed construction?

☐ YES ☒ NO

If Yes, give date and office where notice was filed.

No change in overall height or location of existing structure

10. Unattended operation:

- a. Is unattended operation proposed?

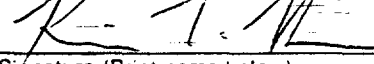
☒ YES ☐ NO

If Yes, and this application is for authority to construct a new station or to make changes in the facilities of an authorized station which proposes unattended operation for the first time, applicant will comply with the several requirements of Section 74.734 (TV Translators) or Section 74.1234 (FM Translators) of the Rules concerning unattended operation.

- b. In space below state name, address and telephone number of a person or persons who may be contacted in an emergency to suspend operation of the translator should such action be deemed necessary by the Commission.

Name	Address (street or other description)	City	State	Telephone No. (include area code)
Ben Miller	TRINITY BROADCASTING NETWORK, INC. P. O. Box A Santa Ana, California	92711		(704) 832-2950

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.


 Signature (Print name below) KEVIN T. FISHER Date 4/9/87 Telephone No. (include area code) (202) 293-7742

☐ Technical Director

☐ Registered Professional Engineer

☒ Consulting Engineer

☐ Chief Operator

☐ Other (specify)

map

JOSEPH E. DUNNE III
COLBY M. MAY*

* ALSO ADMITTED IN VIRGINIA

MAY & DUNNE

CHARTERED

ATTORNEYS AT LAW

1156 - 15TH STREET, N.W.

SUITE 515

WASHINGTON, D.C. 20005-1704

(202) 223-9013

RICHARD G. GAY
OF COUNSEL

TELECOPIER NO.
(202) 223-6992

May 12, 1987

HAND DELIVER

RECEIVED

Mr. William J. Tricarico
Secretary
Federal Communications Commission
Washington, D.C. 20554

MAY 13 1987

FCC
Office of the Secretary

RE: Trinity Broadcasting Network, Inc. Minor Modification of
Television Translator K55CN, Bakersfield, California

Dear Mr. Tricarico:

Filed herewith, in triplicate, on behalf of the Trinity Broadcasting Network, Inc. (TBN), is a minor change application concerning the referenced television translator. This application involves a channel change from channel 55 to channel 58, and is necessitated by the recently granted authorization of Dorothy J. Owens for channel 48, Bakersfield, California (BPCT-850222KG). This application is therefore being submitted in accordance with the new standards enunciated by the Commission on February 27, 1987 in its Report and Order in MM Docket No. 86-286, FCC 87-44. 52-80,000-20, 200

This channel modification will not result in any interference to any existing full power, low power or television translator licensee, permittee or applicant. Moreover, TBN represents as part of its application that it will take whatever steps are necessary to correct any interference problems which may occur, although none are predicted.

Finally, since the channel change herein requested is defined as a "minor change" in accordance with the Report and Order in MM Docket No. 86-286, no fee is required.

May 12, 1987
Page 2

If any questions should arise concerning this matter, kindly contact the undersigned directly.

Respectfully submitted,

TRINITY BROADCASTING NETWORK,
INC.

By: 

Colby M. May
Its Attorney

CMM:gmcB78

xc: Mrs. Jane Duff
Ben Miller

COMMISSION USE ONLY

File No.

**APPLICATION FOR AUTHORITY TO CONSTRUCT OR MAKE CHANGES
IN A LOW POWER TV, TV TRANSLATOR OR FM TRANSLATOR STATION**
(Carefully read instructions before filling out form—RETURN ONLY FORM TO FCC)

Section 1

GENERAL INFORMATION

1. Name of Applicant

Trinity Broadcasting Network, Inc.
Street Address

City

2442 MICHELLE DRIVE TUSTIN

State

ZIP Code

Telephone No. (include area code)

CA

92680

(714) 832-2950

2. This application is for: (check one box)

☐ FM Translator

☒ Low Power Television

☐ Low Power TV-Subscription TV
(FCC approved technical system)

☐ TV Translator

(a) Channel No.

(b) Community of License

City

State

55

BAKERFIELD

CA

(c) Check the appropriate boxes below:

(1) New Station

(2) Modification of Construction Permit (CP)

(Check this box only if CP is not covered by an operating license)

CP File No.

☐

☐

(3) Change in licensed facilities

Call Letters

☐ (check Major or Minor)

K55CN

Major ☐

Minor ☒

Application Reference No.

(4) Amendment of pending applications

Note: If the proposed change is "minor" pursuant to Section 73.3572 of the Commission's Rules attach plots, comparing the existing and proposed protected signal contours as Exhibit No. _____

**For amendments to a previously filed application, submit only Section I and those portions of the form that contain the amended information.

3. (a) Is this application mutually exclusive with a renewal application?

☐ Yes ☒ No

(b) To the applicant's knowledge, is this application mutually exclusive with another application(s)?
If the answer to question 3(a) or 3(b) is Yes, state the following information.

☐ Yes ☒ No

Call letters or File No.

Community of License

City

State

(a) _____

(b) _____

YES NO

4. (a) Is translator applicant the licensee of primary station?

☒ ☐

(b) If answer to 4(a) is No, has written authority been obtained from the licensee of the station whose programs are to be retransmitted?

☐ ☐

5. Station Identification.

The Applicant certifies that it will comply with applicable station identification rules. See Sections 73.1201, 74.783 and 74.1283 of the Commission's Rules.☒ ☐

6. Is type approved broadcast equipment being specified?

☒ ☐

If No, indicate date equipment was submitted to FCC Laboratory for approval.

7. Would a Commission grant of your application be a major action as defined by Section 1.1305 of the of the Commission's Rules?

☐ ☒

If Yes, attach as Exhibit No. _____ the required statement in accordance with Section 1.1311 of the Commission's Rules.

If No, explain briefly.

8. If the application is for a new FM translator, have any funds, legal or engineering services or anything else of value been furnished, directly or indirectly, by the licensee, or permittee of any FM broadcast station or any person associated with such station?

N/A

☐ ☐

If Yes, attach an explanation as Exhibit No. _____, identifying the source and nature of the financial support or assistance.

Applicant's Name

1. Applicant is (check one of the following):

☐ an individual ☐ a general partnership ☐ a limited partnership ☒ a corporation ☐ other

2. If the applicant is an unincorporated association or a legal entity other than an individual, partnership or corporation, described in Exhibit No. ____ the nature of the applicant.

N/A

CITIZENSHIP AND OTHER STATUTORY REQUIREMENTS

YES NO

3. (a) Is the applicant in compliance with the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments?

☒ ☐

(b) Will any funds, credit, etc., for the construction, purchase or operation of the station(s) be provided by aliens, foreign entities, domestic entities controlled by aliens, or other agents?

☐ ☒

If yes, provide particulars as Exhibit No. ____.

4. (a) Has an adverse finding been made, adverse final action taken or consent decree approved by any court or administrative body as to the applicant or any party to the application in any civil or criminal proceeding brought under the provisions of any law related to the following: any felony, antitrust, unfair competition, fraud, unfair labor practices or discrimination?

☐ ☒

(b) Is there now pending in any court or administrative body any proceeding involving any of the matters referred to in 4(a)?

☐ ☒

If the answer to 4(a) or 4(b) is Yes, attach as Exhibit No. ____ a full disclosure concerning the persons and matters involved, identifying the court or administrative body and the proceeding (by dates and file numbers), stating the facts upon which the proceeding was based or the nature of the offense committed, and disposition or current status of the matter.

YES NO

5. Has the applicant or any party to this application had any interest in:

(a) an application which has been dismissed with prejudice by the Commission?

☐ ☒

(b) an application which has been denied by the Commission?

☐ ☒

(c) a broadcast station, the license for which has been revoked?

☐ ☒

(d) an application in any commission proceeding which left unresolved character issues against the applicant?

☐ ☒

If the answer to any of the questions in 5 is yes, state in Exhibit No. ____ the following:

- (i) Name, address and percentage of ownership in applicant;
- (ii) Nature of interest or connection, giving dates;
- (iii) Call letters of stations or file number of application or docket number;
- (iv) Location.

LEGAL QUALIFICATIONS

Multiple Applications

YES NO

6. The applicant certifies that there is no other application pending that would be directly mutually exclusive with this application in which this applicant has an interest of one percent or more or in which any party to this application is an officer, director or has an interest of one percent or more, direct or indirect.

☒ ☐

if no, this application cannot be accepted for filing.

Real Party In Interest Certification

7. The applicant certifies that no agreement, either explicit or implicit, has been entered into for the purposes of transferring or assigning to another party, any station construction permit or license or interest therein that is awarded as a result of a random selection or lottery.

☒ ☐

If No, this application cannot be accepted for filing.

Site Certification

8. The applicant certifies that it has contacted an authorized spokesperson for the owner of the rights to the proposed transmitter site and has obtained reasonable assurance that the site will be available for its use if this application is granted. N/A--modification of K55CN facility to Channel 58 due to the authorization of full power channel 48, Bakersfield, CA

☐ ☐

The person is _____ who can be contacted at the following address and telephone number.

Mailing Address or Identification

City

State

ZIP Code

Telephone No. (Include area code)

Section III

FINANCIAL QUALIFICATIONS
(FM Translator Applicants only)

Note: If this application is for a change in an operating facility, DO NOT fill out this section.

N/A
YES NO

1. The applicant certifies that sufficient net liquid assets are on hand or are available from committed sources to construct and operate the requested facilities for three months without revenue. ☐ ☐
2. The applicant certifies that: (a) it has a reasonable assurance of a present firm intention for each agreement to furnish capital or purchase capital stock by parties to the application, each loan by banks, financial institutions or others and each purchase of equipment on credit; (b) it can and will meet all contractual requirements as to the collateral, guarantees, and capital investment; (c) it has determined that a reasonable assurance exists that all such (excluding banks, financial institutions and equipment manufacturers) have sufficient net liquid assets to meet these commitments. ☐ ☐

N/A
☐ ☐

Section IV

PROGRAM SERVICE STATEMENT

Note: For Low Power Television (including subscription television applicants) only:

1. Low Power Television stations must offer a broadcast program service; a non-program broadcast service will not be permitted. Therefore, attach as Exhibit No. _____, a brief description, in narrative form, of your planned programming service.

Section VII**Equal Employment Opportunity Program**

Does the applicant propose to employ five or more fulltime employees?

☐ YES ☐ NO

If the answer is Yes, the applicant must include an EEO program called for in the separate 5 Point Model EEO Program.

N/A

Section VIII**Certification**

Has or will the applicant comply with the public notice requirement of Section 73.3580 of the Commission's Rules? ☐ YES ☐ NO

N/A

The APPLICANT hereby waives any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations, and that all exhibits are a material part hereof and incorporated herein.

The APPLICANT represents that this application is not filed for the purpose of impeding, obstructing, or delaying determination on any other application with which it may be in conflict.

In accordance with Section 1.65 of the Commission's Rules, the APPLICANT has a continuing obligation to advise the Commission, through amendments, of any substantial and significant changes in information furnished.

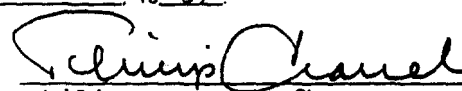
**WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND IMPRISONMENT.
U.S. CODE, TITLE 18, Section 1001.**

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Signed and dated this 11th day of May, 19 87.

TRINITY BROADCASTING NETWORK, INC.

Name of Applicant



Philip A. Crouch Signature

Vice President

Title

**FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT
AND THE PAPERWORK REDUCTION ACT**

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The principal purpose for which the information will be used is to determine if the benefit requested is consistent with the public interest. The staff, consisting variously of attorneys, accountants, engineers, and application examiners, will use the information to determine whether the application should be granted, denied, dismissed, or designated for hearing. If all the information requested is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Accordingly, every effort should be made to provide all necessary information. Your response is required to obtain the requested Authority.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3) AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.

ENGINEERING REPORT

TRINITY BROADCASTING NETWORK, INC.

PROPOSED TELEVISION TRANSLATOR K55CN
CHANNEL 55 - BAKERSFIELD, CALIFORNIA

MAY, 1987

CONTENTS

AFFIDAVIT

EXHIBIT A Engineering Statement

EXHIBIT B Elevation of Antenna Structure

EXHIBIT C Terrain Data

EXHIBIT D Antenna Radiation Pattern Data

EXHIBIT E Allocation Study Data

FCC FORM 346, Section VI

SMITH AND POWSTENKO

BROADCASTING AND TELECOMMUNICATIONS CONSULTANTS

SUITE 600

2033 M STREET, N.W.

WASHINGTON, D. C. 20036

A F F I D A V I T

CITY OF WASHINGTON,)
DISTRICT OF COLUMBIA)

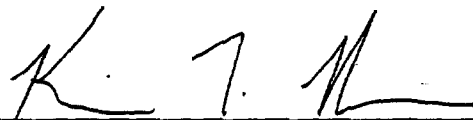
ss:

Kevin T. Fisher, having been duly sworn, deposes and says that:

1. He is a broadcasting consultant practicing in the City of Washington, District of Columbia; he is an associate of the firm of Smith and Powstenko; and his qualifications are on file with the Federal Communications Commission.

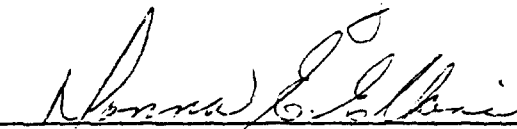
2. The firm of Smith and Powstenko has been retained by TRINITY BROADCASTING NETWORK, INC., licensee of Television Translator K55CN, Channel 55, Bakersfield, California, to prepare engineering data in support of its Application for Construction Permit to specify operation on Channel 58 rather than on Channel 55.

3. The foregoing statements and the attached Engineering Report, which was prepared by him or under his immediate supervision, are true and correct to the best of his knowledge and belief.



KEVIN T. FISHER

Subscribed and sworn to before me this 11th day of May, 1987.


NOTARY PUBLIC, D. C.

My Commission Expires November 30, 1990

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TRINITY BROADCASTING NETWORK, INC. ("TBN"), licensee of Television Translator K55CN, Channel 55, Bakersfield, California, rebroadcasting KTVB-TV, Channel 40, Santa Ana, California. It is proposed by TBN to make changes in its translator facilities, and the attached data supports its Application for Construction Permit to effect such changes.

TBN wishes to change the channel on which K55CN now operates to Channel 58 to avoid receiving severe interference from a soon-to-be-implemented authorization for a new full-service UHF television station on Channel 48 in Bakersfield (BPCT-850222KG). That Construction Permit specifies a site that is but 100 feet from K55CN, and such proximity would certainly result in significant degradation of K55CN's signal. We therefore conducted a thorough search of the UHF band to find another channel on which K55CN could operate without causing interference to any licensed, authorized, or proposed full-service or translator/LPTV facility. The result is the instant proposal for operation on Channel 58.

Since the location of the K55CN site will remain as licensed in BLTT-821014IM, no site location map is included herein. K55CN is presently mounted on a tower which also supports three Bakersfield FM stations, KQXR, KGFM, and KKXX, as well as KPWR-TV, Channel 17, Bakersfield. Exhibit B depicts a standard Bogner B4US antenna mounted on the existing supporting

EXHIBIT A

structure. Exhibit C is a tabulation of terrain data for the present site. These data were generated by computer, using the NGDC 30-second point topography data base.

Antenna radiation pattern data are included as Exhibit D, and a detailed allocation study describing the criteria for the use of Channel 58 by K55CN is provided as Exhibit E. Since no change in the overall height or location of K55CN is being proposed, the FAA has not been notified of this application.

Now that the FCC considers the biological effects of non-ionizing electromagnetic radiation in its environmental determinations, this subject has been studied with respect to the proposed facility. Assuming an ERP of 9.24 kw (average visual power plus aural power [assumed to be 20 percent of peak visual power]), an effective antenna height of 10.7 meters above ground, and a typical UHF antenna relative field of 0.10 in the vertical plane (from *OST Bulletin No. 65*), the maximum calculated power density at the base of the tower is 0.027 mw/cm². According to the cited bulletin the maximum allowable power density for a station transmitting on this frequency (734-740 MHz) is 2.45 mw/cm². Thus, operation of the proposed translator would contribute little more than one percent to the total allowable radiation environment, and a grant of this proposal would certainly not be considered a major environmental action in this respect. However, due to the complicated nature of power density calculations at multi-user communications sites such as that on Mount Adelaide, applicant will actively

EXHIBIT A

participate in a joint engineering study to determine power density levels at this site if such is deemed to be necessary.

It is important to note that K55CN has operated atop Mount Adelaide, along with numerous other broadcast facilities, on a non-interference basis for a number of years. While it is believed that operation on Channel 58 will not interfere with the operations of other facilities at this communications site, if such a problem should arise, applicant will take whatever corrective steps are necessary to remedy it.